The Dichotomy of Human Variations:

Biological and Cultural Differences

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Abstract

Human kind goes back millions of years, and since the first Hominin walked on its two feet, human kind began to develop and it’s what made humans what they are today. From learning to walk as an infant to eating, speaking, learning and reproducing, humans have lived their lives in many different variations. Biologically, humans are meant to look what they look now. Culturally, humans are living the way they want to live.

For this assignment, I will be talking about the dichotomy of human variations, biological and cultural perspectives, the characteristics of human features and life styles. The evolution of how humans became modern humans in the evolution history. I will also compare to my life as a human to how my characteristics can relate to the human life span.

Introduction

One of the earth’s most defining moments that happened sixty-five million years ago, this was the extinction of the Dinosaurs and the end of the Mesozoic era. They were once the rulers of the earth, but were replaced when certain animals survived the mass extinction, mammals. These creatures will take the sport of the dinosaurs as the dominate species. These new mammals were warm-blooded, possession of hair and fur, and were giving birth to their young, unlike the animals before mammals, who were laying eggs. As years past by and the earth was recovering from the extinction, mammals began to develop, and a new one had arrived. The first hominids evolved in the early Paleocene era, about 50-55 million years ago. These were the great ancestors of modern humans. (Dennis O’Neil, 1999-2000)

At the time, the world was very different from what it is today. One of the earliest primate that was discovered was the Darwinius. In 2009, it’s complete fossil skeleton was discovered. From what the fossil shows, the primate looks more like a rat than a modern monkey. (Dennis O’Neil, 1999-2000) This had amazed scientists and paleontologists to how much evolution had come to. Over time, more ancient primates were discovered until in 1974, Lucy was discovered. Lucy was described as an Australopithecus afarensis. Although 40% of her skeleton was found, this was an important discovery as Lucy was the earliest hominin (primates that walk on two feet) to be found. The first early human. Lucy said to have lived 3-4 million years ago. (Robert Jurmain, Lynn Kilgore 2016) Evolution is again a big factor and shows how humans were like millions of years back. It is now modern-day earth, and humans are the dominate species. We are divided from nations, race, and culture. Evolution plays here again, as it’s the reason as humans are what they are today.

Human Reproduction/Dimorphism

Every animal has a chance to have an offspring. In the early years of life, majority of animals lay eggs, and their babies are born once they hatch. Around the late Triassic Period about 200 million years ago, the first mammals started to give birth to their young rather than laying eggs. (Peter J. Bryant, 2002). Humans are classified as mammals because of the females giving birth and the relationship between humans and primates.

A human offspring has selected features from both parents, that is because of the genes and chromosomes that the offspring received from the parents. (Robert Jurmain, Lynn Kilgore, 2016) The journey of human life starts with an intense race. Millions of sperm cells travel up the female’s uterus, the fastest and the strongest sperms will reach to its main destination, the egg. Once that sperm cell has made it to the egg, conception occurs, half of the male’s and half of the female’s sex chromosomes combined. This creates a unique DNA code that is required to create a new life. Special proteins are there to help provide the DNA structure. This DNA code will decide the sex, skin tone, hair and eye colors. This is when the offspring takes its genes from its parents. The egg then grows and after nine months, a human baby is born. (Robert Jurmain, Lynn Kilgore, 2016)

According to paleontologists, in early animal life, females were stronger and more superior than their male counter parts, but today the roles have reversed. The differences between the sexes of a human male and female are based on sexual dimorphism. (Folkens P. and Laura Klappenbach, 2002) It shows differences in appearance when it comes to both sexes. The male is bigger in height and in proportions, and stronger in strength, while the female is smaller in proportions and less as powerful than the male. Sexual dimorphism is also visible in large primates, such as baboons, chimpanzees and gorillas. (Folkens P. 2002) Female primates tend to go for the males that are bigger in size, have color and have a unique feature that no other male will have. This is the male dominance in the animal kingdom.

The Hominin Features in Biology and Culture

Modern day humans are still evolving, but the features are still the same since as far back literature can take us. The early hominins are theorized to be early humans that walked on two feet, have spinal cords, arm lengths and have face forward eyes. Their behavior was like modern day apes, but sooner evolved to homo sapiens (modern human). The body structures of past hominins are very similar to homo sapiens, only minor differences (Ian Tattersall, 2012). Observation by scientists, early hominis skulls had lower but larger craniums, their brow ridge was also larger, the same with their noses. From their skulls alone, hypothesis show that early hominins had larger and thicker bodies, while modern homo sapiens have leaner and thinner bodies. The characteristics of ancient hominins were, as said, like modern primates, (Ian Tattersall, 2012) and it has been misunderstood that many people believe that humans evolved from monkeys. While that was proven wrong, the characteristics of early hominins to homo sapiens have changed. Humans are featured the way evolution wanted them to be, but through social learning in human societies, we have learned culture. Culture is the characteristics and knowledge of different people’s arts and manifestations such as language, religion, foods, social habits, behavior and beautiful music (Kim Zimmermann, 2017). As human kind was developing, humans have learned over three hundred different languages that are still spoken today. (Zimmermann, 2017).

Each rich culture is divided and influenced into different parts earth, such as the African culture. Though it is more likely that humans originated in the African continent, the culture in Africa is a mixture of tribes, ethnic and social groups that have their own unique characteristics. They are more genetically different than other cultures, but with over 3000 different ethic groups, it is possible that early human ancestors are from Africa.

Race

With different cultures, there are different races that go along with it. When it comes to race, the term with reference to modern day times are physical traits, such as skin color, hair color, body and face features, and eye colors. Many people categorize races from different places of the world, such as the “American race”, “European race” and the “African Race”. There are also races that are named after practiced religions, such as the “Jewish race”. (Peter Wade, 2017).

It is unknown what color of the skin was when the first hominins walked on earth. Since there is evidence that they originated from Africa, geographically, their skin color would either black or brown color. So where did skin colors like white come from? This is due to a pigment call Melanin. (Dennis O’Neil, 1998). Controlled by six genes, Melanin forms from different amino acids. This means it is responsible for the different skin and hair colors of all humans, but it depends on the exposure of sun tanning and natural selection. In Africa, the sun is exposed most of the time, and due to this, melanin naturally chooses Africans to have black skin. Sun exposure in Europe and Asia is not as bad as it is in Africa. Due to the cooler temperatures, melanin naturally chooses the skin colors of Europeans and Asians to be different tones of white colors. (Dennis O’Neil, 1998).

As for the Americas, they are some of the most diverse places in the world, especially in the United States. When Christopher Columbus first founded the Americas back in 1492, many others from the Europeans soon followed as they took over the land that was the original home of Native Americans. (Doak, Robin, 2005). Years later, Americans would bring in black slaves from Africa. It wasn’t until 1865 that slavery was banned, and thus this how America is having multiple colored races live in the country at the same time.

Human Behavior

Human development goes even further when it comes to behavior. Human behavior is depended on emotions. Humans have many exclusive emotions that other animals cannot feel. Human Behavior is influenced by what they see in the world, they feel because it’s their behavior that gets them what they want to know. (Phillippe Denichaud and John Parikhal, 2013).

Each person’s behavior is impacted by traits, thus what they see in the world, makes them react to it. It is because of these traits that racism exists, why wars are caused, and why religion beliefs are taken seriously. (Phillippe Denichaud and John Parikhal, 2013). But was this how the first hominins used their behavior? It has been said that humans came from monkeys, even though that is false, the behavior may not be far off. If we do look at modern day primates, they do have similar characteristics that they share with humans. (Robert Jurmain, Lynn Kilgore 2016).

Skeletons of both species is very similar, but humans have spinal cords that allow them to walk up right on two feet full time, when some large primates can only walk on two feet limited time. (Kate Mulcahy, 2012). Their eyes and facial expressions are similar because of how their skulls are formed. Primates tend to scream, screech and make hissing sounds when they react to danger. Modern Humans spend a good amount of time socializing, it’s a way for people to get to know each other. Chimpanzees also spend a good amount of time together, such as doing activities as playing, searching and eating bugs. Chimps also strengthen their bonding by grooming each other. (Kate Mulcahy, 2012)

Humans may find it weird if one grooms another, but their bonding strengthens by talking and understanding each other. Early hominis learned these behaviors as they developed. The evidence of what modern primates do now is some proof of what early humans did when they first walked on earth. Today, humans are now the dominate species on earth, and it is their developed behavior that gave them that title.

Tools and Technology

One other characteristic that modern primates and humans have are the use of tools. Chimpanzees use tools such as rocks to make a hummer out of it. They use twigs to fish and they can make weapons out of rocks. (Kate Mulcahy, 2012). Humans can make their tools out of anything. They have the material to make metal hammers, the materials to make fishing poles and materials to make guns as weapons. It wasn’t always like this for humans. Early hominins once used like chimpanzees do now. They would use certain stones to crack nuts, to crush bones or to defend themselves by throwing the stones at the threat. Scientists calls these rocks, Oldowan stones. (Robert Jurmain, Lynn Kilgore, 2016) Early hominins mostly used these tools as hammerstones. Just like how chimpanzees use rocks as hammers. These stones date back to 3.3 million years ago, and it took some time for the human to invent an actual hammer tool, but it was that many years ago that early humans began inventing.

Today, technology is highly advanced. It is probably the defining moment for humans to have this much technology and this much intelligence. Early hominin footprints were discovered that dated back 4 million years ago, it was made by one individual walking straight forward. This shows that early humans walked up straight like today. This was millions of years ago when humans lived in the wild. Years later in 1969, humans now have the technology to fly into outer space and make whole new footprints, this time on the moon. (Robert Jurmain, Lynn Kilgore, 2016).

Evolution has come this far for humans to travel to other worlds other than earth. Within the next decade, plans are set to send the first humans to Planet Mars, where the possibilities to start a new human civilization may begin. The chances of humans evolving to Mars’s atmosphere is a new challenge for evolution, since they’re a species from one world living in a whole new world for nature to set up itself.

Experience/Conclusion

I’m still a young hominin. At 23 years old, I have experience a lot of what humans have done for the earth, some good and some bad. We are mostly focusing on what is happening around us right now, but we live the way we want to live. I have learned may cultures in my lifetime, and I do have my beliefs, but knowing that I have freedom on my side gives me great pleasure to live. I always try to think and be positive as a human being, but the world around me and for everyone else can be negative. Just like early hominins, we learn behavior and we stick with it. Some people choose to hate, some people choose to love, others want to learn, study, be happy, be afraid or to be apathetic. I have witnessed a lot, but what will I miss when I’m gone? What will everyone around me miss when we are gone? When the first hominin was developed on earth, it led to an amazing journey in evolution, but are humans going to go extinct soon?

It may sound ridiculous, because humans are too “smart” to be extinct. Humans do show high showings of intelligence, but human extinction can be Anthropogenic (result of human actions). There is nuclear war, man-made diseases, or even artificial intelligence that could wipe humans out. If humans do prevent all of those, there is still nature to be dealt with. Due to Earth’s history, nature selected the dinosaurs and other different species for extinction, and humans cannot do anything to avoid that list. Technology, however, is highly advanced. It is possible for humans to tamper with nature, but without mentioning the consequences.

Early hominins had left their mark when their fossils and skeletal remains were found by modern humans to study and learn about the past. If modern humans do go extinct, they will do the same as the early hominins did. They’re fossil remains will be found by a new intelligent species made by evolution. This new species will discover how humans lived, what they’re behavior was, what tools they used and how they developed. They will soon learn how long of an amazing journey it took these humans to be so smart.

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